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**FACULTY WORKING
PAPER NO. 764**

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Family in France

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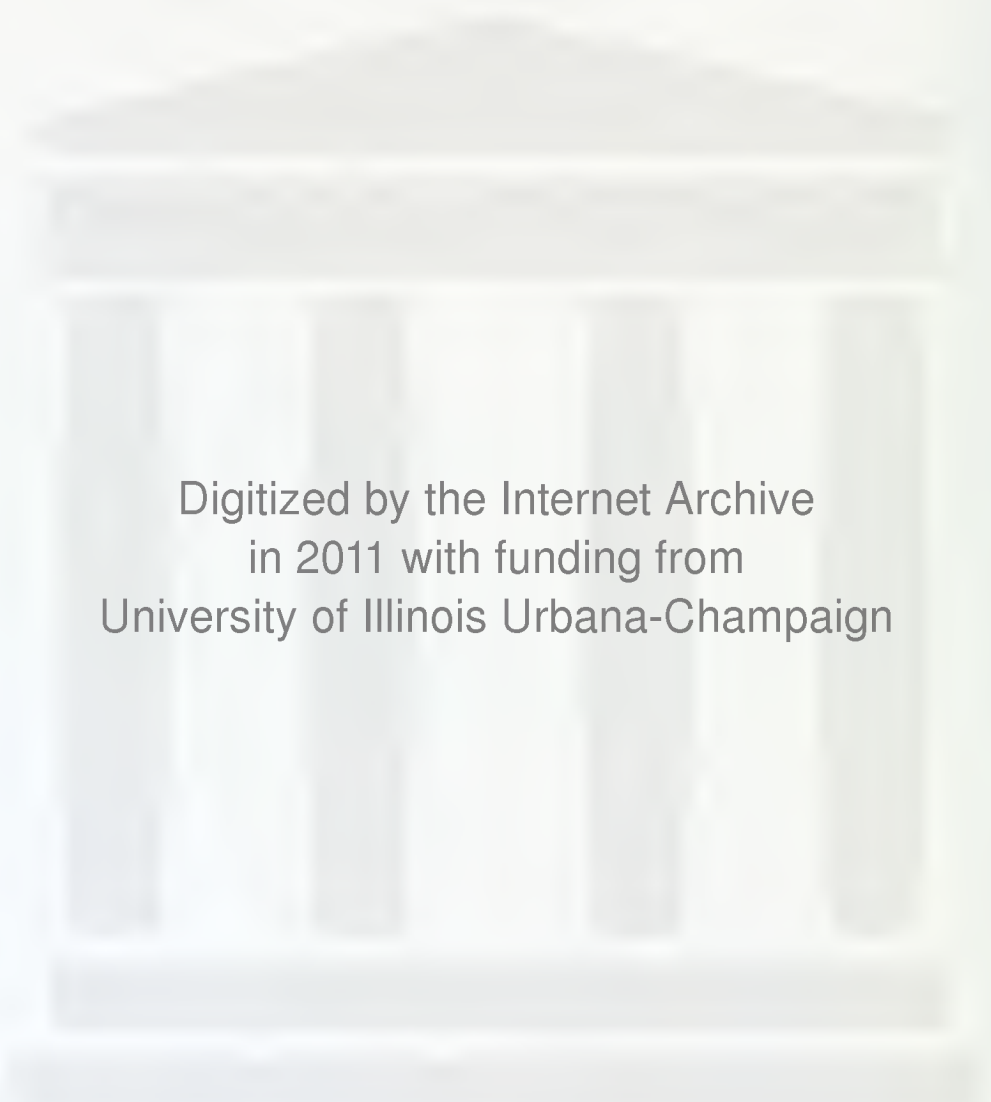
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April 1981

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Family in France

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DRAFT: Not for Quotation
Comments Invited

Abstract

This paper examines the ways in which the French income tax impacts family behavior and suggests some areas for future research.

Income Tax Treatment of the Family in France

After a quarter of a century of discussion and resistance, a general income tax was introduced in France in 1914. The tax, which took effect in 1915, was levied at a rate of 2 percent on net income in excess of 5000 F. The economic situation of the family was recognized through an additional exemption of 2000 F for married couples plus a 1000 F exemption for each child.

During the Second World War, the rates on the income tax were increased, and the tax became highly progressive. In 1945, the exemption system gave way to the "quotient familial." Under the quotient, income of the family is divided into a number of parts depending on the number of persons in the family. A progressive rate schedule is applied and the resulting tax liability is multiplied by the number of parts.[1]

According to the current quotient familial, one part is allowed for a single, widowed, or divorced person, and two parts are allowed for married couples. Married couples with dependent children are allocated an additional half part for each child, except for the fifth child which accounts for a full part under the tax law of 1980.[2] In addition, special provisions are made for disabled children, and for single, divorced, or widowed persons with children.

Besides the quotient familial, there are several other provisions in the French income tax which affect families. For example, a child care deduction of up to 3,000 F per child is available to single parent households with children under 4 years of age. A similar deduction is

not available to married couples with preschool children. Other deductions, such as the housing deduction are subject to limits depending on the size of the family. In the case of the housing deduction, which is primarily a deduction for mortgage interest, the limit is 7,000 F per year plus 1,000 F per dependent.

For each part of taxable income, the tax schedule applying to income of 1979 is shown in Table 1. After application of the rate schedule, the resulting figure is multiplied by the number of parts to obtain the family's tax liability. For instance, in 1979, a married couple with two children paid an income tax as indicated in Table 2.

Since the tax per part is progressive, the French income tax favors additional children. Tables 3 and 4 show the tax liability and tax saving per additional child for a married couple at different income levels in 1979. Note that the incremental saving per child decreases as the number of children increases, holding income constant, except for the fifth child which accounts for an additional half part. Further, an additional child is more valuable in terms of tax savings to a high income family than to a low income family.

The French income tax also favors marriage except among people with substantially equal incomes. Table 5 shows that the saving from marriage varies negatively with the equality of the income distribution between the spouses, with the greatest gains from marriage being realized when one spouse has all the income. For a marriage with a 30 year life expectancy, these tax savings can be substantial. See Table 6.

At the same time, the French income tax contains some perverse incentives for divorce among couples with children. This is due to

Table 1: Schedule of income tax rates
applying to each part of income, 1979.

Bracket	Rate in percent
8,725 F or less	0
8,725 F to 9,125 F	5
9,125 F to 10,825 F	10
10,825 F to 17,125 F	15
17,125 F to 22,275 F	20
22,275 F to 28,000 F	25
28,000 F to 33,875 F	30
33,875 F to 39,075 F	35
39,075 F to 65,125 F	40
65,125 F to 89,575 F	45
89,575 F to 105,950 F	50
105,950 F to 125,050 F	55
More than 125,050 F	60

Source: Ministère du Budget, <u>Précis de Fiscalité</u>, 1980, p. 69.

Table 2: Income tax liability of a
married couple with two children,
1979 (in FF)

Income	Income tax liability
20,000	0
50,000	3,199
100,000	15,589

Table 3: Income tax liability of a
married couple by income level
and number of children, 1979 (in FF)

Annual income	Number of children					
	0	1	2	3	4	5
20,000	0	0	0	0	0	0
60,000	8,393	6,491	5,130	3,985	3,265	1,831
100,000	23,098	18,872	15,589	13,187	11,385	8,550
200,000	67,628	60,731	54,878	50,421	46,195	37,744

Table 4: Tax saving for each additional
child by income level, 1979 (in FF)

Annual income	Children				
	First	Second	Third	Fourth	Fifth
20,000	0	0	0	0	0
60,000	1,902	1,361	1,145	720	1,434
100,000	4,226	3,283	2,402	1,802	2,335
200,000	6,897	5,853	4,457	4,226	8,451

Table 5: Tax savings through marriage
by income level and distribution of
income within the family, 1979 (in FF)[a]

Total family income	Ratio of Incomes			
	0	1/4	1/2	1
10,000	108	0	0	0
20,000	1,495	751	346	0
60,000	7,156	2,722	866	0
100,000	10,716	2,905	396	0
200,000	24,636	8,185	2,744	0

[a]Assumes no children.

Table 6: Tax saving through marriage
by income level and length of
marriage, 1979 (in FF)[a]

Present value of tax saving[b]

Total family income	Life expectancy of 10 years	Life expectancy of 20 years	Life expectancy of 30 years
10,000	893	1,497	1,905
20,000	12,364	20,721	26,272
60,000	59,180	99,182	126,232
100,000	88,621	148,524	189,030
200,000	203,740	341,455	434,579

[a]Assumes no children. One spouse receives all the couple's aggregate income.

[b]Computed using an interest rate of 4 percent a year.

the extra half part per spouse under the quotient familial, to the child care credit for single parent families, and to the limit on the housing deduction. To take an extreme example, consider a couple with two children under four years of age. Table 7 shows the gain from divorce at different income levels if each parent claims one child as a dependent, and each makes full use of the housing deduction. For these tax savings to be large, each spouse has to have a substantial salary. Otherwise the tax system strongly favors marriage.[3]

The decision whether or not to enter the labor force is also potentially affected by the tax system. Here it is useful to distinguish between primary workers, persons for whom the question of whether or not to enter the labor force is not in doubt, and secondary workers, who may choose to work or not depending on the opportunities. Married women are an important part of this second group. For secondary workers, the labor force participation decision depends on the marginal rate of tax, which, in tax systems such as the French one where income is aggregated for tax purposes, depends on the earnings of the spouse. Table 8 shows a comparison of the marginal and average rates of French income tax by income level for 1979 for a married couple with no children. The marginal tax rate reaches a maximum of 60 percent.

How important are these incentives in the French tax system? To date, there have been no empirical studies on the effect of taxation on fertility or family formation. There has, however, been substantial research on the impact of taxation on the work decision. This research has been stimulated in part by the ready availability of data

Table 7: Tax saving from divorce
for a couple with two preschool
children, 1979 (in FF)[a]

Income[b]	Tax Saving from divorce
10,000	0
20,000	0
60,000	3,349
100,000	6,449
200,000	13,250

[a]Assumes income equally divided between the spouses, each parent claims one child as a dependent, and each parent makes full use of his/her housing deduction.

[b]Total family income before housing and child care deductions.

Table 8: Marginal and average rates
of tax facing a married couple with
no children, 1979 (in percents)

Income	Marginal tax rate	Average tax rate
10,000 FF	0	0
20,000 FF	20.0	1.1
60,000 FF	40.0	14.0
100,000 FF	50.0	23.1
200,000 FF	60.0	33.8

on labor supply, and, in part, by the indeterminancy of economic theory in evaluating the impact of taxation on work behavior.

Theory suggests that a tax on earnings has two opposing effects on the work decision. The tax, by lowering the net return for work, discourages work through a substitution effect. At the same time, the tax reduces after-tax income, making it more difficult to realize commitments, influencing people to work harder. This latter effect is called the income effect. In a family context, there are also cross-effects, whereby a reduction in the net wage of one's spouse affects one's own work decision. The final result of these opposing effects cannot be answered by theory alone.

One of the earliest studies to explore the effect of taxation on work behavior was by Kosters (1969) who developed and estimated a family labor supply model. Using cross-section data drawn from the one-in-a-thousand sample of the 1960 U.S. Census, he estimated hours worked functions for male heads of households, 50-64 years old. He found wage rate elasticity estimates to be negative and significant; however, estimates of the income elasticity were generally insignificant. He concluded that the compensated wage elasticity for males is close to zero and that a change in the income tax rate is likely to have a small effect on the labor supply of male primary workers.

The evidence on secondary, married female, workers is quite different, however. Rosen (1976) used data from the 1967 Survey of Work Experience for U.S. Women, 30-44 years of age, to examine the impact of tax rates on the labor supply of married women. Explicit attention was focused on the extent to which individuals react to the net rather

than the gross wage. In the study, Rosen tested the hypothesis that
workers react to income tax increases in the same manner as they respond
to any other reduction in net earnings. He found no evidence of tax
illusion among married women workers, but did find women's labor supply
to be highly responsive to changes in the tax rate.

In a series of studies using data from the National Longitudinal
Survey of U.S. Women, ages 30-44 years in 1967, 1969, and 1971, I ex-
amined in more detail the impact of taxation on the work behavior of
families.[4] Based on a probit estimation of a conditional probability
model of labor force participation, I found that taxes have a negative
impact on the labor force participation of married women. Ordinary
least squares estimation of an hours equation for working wives also
uncovered a negative influence of taxation on the work decision. When
the model was extended to two-earner families and labor supply functions
estimated for both husbands and wives, negative tax elasticities were
discovered for wives and positive elasticities for husbands. According
to these results, an increase in taxation leads to a reallocation of
labor time among family members with the wife decreasing and the husband
increasing the share of total family time spent working outside the home.

Researchers have just begun to scratch the surface in the study of
the impact of taxation on the family and on family behavior. This
paper concludes with a discussion of possible directions for future
research.

One interesting area for future research is on the potential effect
of converting the French income tax from a family basis to an individual
basis. Among OECD countries in recent years, there has been a strong

trend away from compulsory joint or family taxation towards individual taxation.[5] As of 1977, individual taxation was allowed in seventeen OECD countries and was compulsory in thirteen. Research is needed to highlight the shifts in relative tax burdens involved in moving from the family to the individual as the unit of taxation.

A second area for future research is on the responsiveness of family behavior to changes in the marginal tax rates. One consequence of individual taxation is to dramatically lower the marginal tax rate on secondary workers in the family. If the results of American empirical studies can be applied to France, increases in female labor force participation could be expected. Studies using French data are obviously needed to confirm this result. In making these studies, particular attention should be paid to non-linearities and discontinuities in the tax system which might affect labor force behavior.

Finally, the influence of the French income tax on other aspects of family decision-making such as occupation choice, investment in human capital, the allocation of time to non-market activities, fertility, and marriage need to be studied. By their nature, these are life-cycle decisions best treated within a dynamic framework. Recent advances in modeling life-cycle family behavior by Ghez and Becker (1975), Smith (1972), and Heckman and McCurdy (1980) open the way for studying the impact of taxation on life-cycle family decisions. Longitudinal data are needed to implement these models for the French tax system.

FOOTNOTES

[1] See Neurrisse (1978) for an in depth account of the development of the French income tax.

[2] Dependent children fall into several categories. To quality as a dependent for tax purposes, a child must be single and less than 18 years of age. Children over 18 years of age may be claimed as dependents if they are under 21 and living at home, a student under 25 years of age, or in the military service. Married children, parents, and brothers or sisters may also be treated as dependents under certain circumstances.

[3] For a discussion of the penalty to marriage within the French tax system, see Philippe (1980).

[4] See Leuthold (1978 a and b, 1979).

[5] OECD (1977), p. 15.

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